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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,170

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Xavier Couillens

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EXAMINER

SZEKELY, PETER A

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

06/09/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/583,170	<b>Applicant(s)</b> COUILLENS ET AL.	
	<b>Examiner</b> Peter Szekely	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. A ratio cannot be expressed in percentages. Furthermore the conjunction separating the scavengers from the melamine derivatives should be “or” or “and/or”. As it is, it is quite confusing and it contains improper Markush language.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 18-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. 6,174,943, Schlosser et al. 6,255,371, Jenewein et al. 6,365,071, Horold 6,420,459, Klatt et al. 6,538,054, Schlosser et al. 6,547,992, Bajgur et al. 6,689,825, Hoerold et al. 7,087,666, Bauer et al. 7,148,276, Bienmuller et al. 2003/0083409, Bienmuller et al. 2003/0149145, Knop et al. 2004/0110878, Knop et al. 2005/0049339, Knop et al. 2005/0101708, De Wit 2005/0137297, Borade et al. 2008/0139711 or Elango et al. 2009/0036578, in view of Abolins et al. 4,233,199 or Atarashi et al. 6,025,421.

7. Matsumoto et al. disclose polyester, phosphorus compound and silicate in claim 1, mica (an aluminosilicate) in claim 3, terephthalates in column 6, lines 9-17 and resorcinol bis diphenyl phosphate (RDP) in column 8, lines 65-67. Schlosser et al. ('371) teach phosphinates in claim 1, melamine polyphosphate (MPP) in claim 13, polyesters and polyamides in claim 15 and concentrations in claims 20-22. Jenewein et al. teach phosphinic salt and a synergist in claim 1, melamine cyanurate (MC) and melamine phosphate (MP) in claim 3, polyamides and polyesters in claim 6 and concentrations in claims 11-13. Horold ('459) recites phosphinates in claim 1, MP in claim 11, concentrations in claims 10 and 12 and thermosetting resins in claim 21. Klatt et al. divulge polyester and MC in claim 1, RDP in claim 3, PET and PBT in claim 5. Schlosser et al. ('922) teach phosphinates, hydrotalcites and magnesium carbonate

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In claim 1, MC and MP in claim 8, polyamides and polyesters in claim 12, concentrations in claim 14 and Table 7. Bajgur et al. reveal MPP and RDP in the paragraph overlapping columns 10 and 11 and thermoplastic resin in claim 11. Hoerold et al. ('666) recite phosphinates in claim 1, MP and MPP in claim 18, melem, melam and melon in claim 19 and concentrations in column 11, lines 18-24. Bauer et al. display phosphinates in claim 1, MP and MPP in claim 6, melem, melam and melon in claim 7 polyamid 6.6 in column 7, line 54 and concentrations in column 7, lines 13-20. Bienmuller et al. ('409) describe polyesters and phosphinates, phosphorus compounds and nitrogen compounds in claim 1, PET and PBT in claim 3, concentrations in claims 5-6, MC in claim 9 and bisphenol A bis diphenyl phosphate (BDP) in claim 11. Bienmuller et al. ('145) describe polyester, MC and P containing compound in claim 1, RDP and BDP in claim 4 and PET and PBT in claim 7. Knop et al. ('878) discuss phosphinates and synergists in claim 1, concentrations in claim 8, P containing compounds in claim 10, resins in claim 16 and MPP in claim 13. Knop et al. ('339) discuss phosphinates and synergists in claim 1, concentrations in claims 8-9, P containing compounds in claim 10, MC and MPP in claim 11 and resins in claim 17. Knop et al. ('708) discuss phosphinates and synergists in claim 1, concentrations in claims 8-9 and 13-14, MC and MPP in claim 15, and resins in claim 17. De Wit presents polyesters, cyanurates and phosphinates in claim 1 and claim 3, MPP and MC in claim 10 concentrations and PBT in paragraphs 0035 and 0019. Borade et al. list polyester, phosphinate, MC, MP and MPP in claim 1 and PET in claim 13. Elango et al. show the same subject matter in claims 1-2. None of the above references mention

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impregnating P containing compound on porous support. However, Abolins et al. relate premixing phosphorus compounds and fillers in claim 13 and its advantages in column 5, lines 49-61. See column 3, lines 18-42 and column 4, lines 49-65 for ingredients. Atarashi et al. mention polymer and phosphate treated filler in claim 1, silica in claim 8, RDP in column 2, line 59, other minerals in column 3, lines 41-55 and adding other flame-retardants in column 4, lines 30-32. The process ensures humidity resistance. Accordingly, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to coat the phosphorus containing flame-retardants on a porous substrate. It would have also been obvious to select applicants' ingredients from a list of equivalents.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (571) 272-1124. The examiner can normally be reached on 6:10 a.m.-4:40 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter Szekely/  
Primary Examiner, Art Unit 1796

/P. S./  
Primary Examiner, Art Unit 1796  
6/4/09